42 C. angina Pectoris #15

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Angina Pectoris.

Nothing original can be offered on the nature of a disease which has been so thoroughly discussed by men of the highest rank in the medical profession.

Amidst the numerous & conflicting theories already announced to the medical world we shall discover some traces of ingenuity enveloped by a host of the most flagrant absurdities.

In attempting to cull from the various opinions of authors who have treated of this disease, what appears worthy to arrest our attention I have involved myself in a task of some difficulty.

The hypotheses of the present day, though aided by all the powers of sound ratiocination and embellished by all the beauties of rhetoric, may yet be the theme of ludicrous jest or vulgar ribaldry. We may indulge a hope that such a fate does not await them all; but that some will defy the test of scrutiny and the ordeal of time.

The disease now in question is fortunately one of rare occurrence, so much so, indeed as to admit a doubt whether it exists as described by authors.

It commences its attack frequently without any premonitory symptoms, while the patient is sitting or standing in a state of quiescence both bodily & mental. The patient is then seized with an acute pain in the breast, or at the extremity of the sternum inclining to the left side & extending into the arm as far as the insertion of the deltoid muscle.

These symptoms are aggravated by a sense of suffocation and a distressing apprehension of impending dissolution.

The attack, however, generally comes on more gradually, and is then characterised by the following symptoms.– A person while fatigued either with walking or some other exertion, is seized with a violent constrictory pain at the lower end of the sternum inclining to the left side, and extending into the arm as far as the insertion of the deltoid muscle, or even to the ends of the fingers, accompanied with a

violent palpitation of the heart, difficult respiration, and a sense of suffocation &c.

As soon as he desists from exercise and remains quiet the attack ceases or abates much of its violence: but when the disease becomes confirmed from long standing it does not so readily subside. The attack is sometimes brought on while the patient is in bed, either by coughing, loud speaking, or some undue mental excitement.- Ascending a pair of stairs or any height whatever, by disturbing the respiratory functions will generally induce an attack in those predisposed to the disease.- Repletion from too great indulgence in eating & drinking is also enumerated among the other exciting causes of Angina.

Angina generally selects for its victim the plethoric and sedentary, particularly those who have short necks, large heads, & high shoulders.- It also most frequently attacks males instead of females, and those about the meridian of life.- To this rule however,

there are some exceptions. - In those cases it has attacked persons very dissimilar in appearance & temperament, being of a thin, chachectic habit. -

The pathology of this disease is one of the most fruitful themes of controversy in the science of medicine & little advance has yet been made towards a development of the mystery - .

To Dr Heberden we are indebted for the first treatise on the subject, published about sixty years ago. - about the same time many eminent physicians attempted to investigate its nature, which resulted in a belief that it was spasmodic. - To shew that their hypothesis was not well founded we may observe that they were unable to designate the part affected?

The researches of Dr Parry have led him to a very different conclusion. He thinks in reality it is nothing more than a case of syncope, which Dr Cullen defines "Motus cordis imminutus vel aliquamdiu quiescens" and as differing from common syncope only in being pre-

-ceded by an unusual degree of pain and anxiety about the sternum and in being brought on in a state of apparent health by violent muscular exertion of any kind. The cause of the disease he traces to an ossification of the coronary arteries of the heart. — He says; I use his own words, the rigidity of the coronary arteries thus induced may act, proportionably to the extent of the ossification' as a mechanical impediment to the motion of the heart. and though a quantity of blood may circulate through these arteries sufficient to nourish the heart, as appears in some instances, from the size & firmness of that organ yet there may probably be less than what is requisite for a ready & vigorous action. — Hence though a heart thus diseased may be fit for the purposes of common circulation during a state of mental & bodily tranquility, and of health otherwise good; yet when any unusual exertion is required its powers may fail under the new & extraordinary demands".

In accordance with his favourite theory he endeavours to prove that all the symptoms of angina are the effect of blood retarded and accumulated in the heart or large vessels in its vicinity: and that the causes exciting the paroxysms are those which produce this accumulation; either by mechanical pressure or by stimulating in an excessive degree the circulating system in consequence of which the heart weakened by the malorganization readily sinks into a state of quiescence while the blood continues to advance in the veins.

In opposition to this theory it appears, on the authority of Dr. Chapman that "post mortem examinations" do not always reveal the same diseased appearances of the heart, and in some cases where ossification has been present angina was not the result. "Such a variety of morbid appearances are discovered on dissecting those who have died of angina as to invalidate if not entirely to refute the hypothesis

of Dr Parry.–

The theory of Dr Parry is supported by the authority of Dr Thomas who thinks that it is either owing to an ossification of the coronary arteries of the heart or to some organic lesion (usually of an osseous nature) existing at the origin of the circulation.–

Another doctrine totally different from those already cited, was advanced by Dr Darwin whose high authority entitles even his errors to some degree of respect.– He considers angina pectoris a species of asthma and from him the disease has derived its name, asthma dolorificum.

The apparent analogy existing between these two diseases gives plausibility at least to his theory though on a strict examination of the symptoms they are found to differ materially. Asthma usually assumes a more chronic form, being most frequently preceded by symptoms which indicate the nature of the impending malady – and give time to the Physician

to ward off its attack, or mitigate its violence -

Dr Hosack of New York attributes the disease to a plethora of the blood veſsels and more especially a disproportionate accumulation in the veſsels of the heart. The opinion of that eminent physician, always entitled to respect is rendered more plausible by the plethoric habit of those who have fallen victims to the disease. Diſsections of such patients have shown the veſsels in a state of distension; effusions of water in the Thorax; vast accumulations of fat; and sometimes bony deposits in the veſsels & valves of the heart.

It is objected to this doctrine by Dr Chapman that if mere plethora of the veſsels of the heart were the cause an attack of angina would ensue always as a consequence of such fullneſs. - Plethora however we know does sometimes exist without inducing an attack of angina; instances we have in palpitations which are sometimes attributable to plethora.

Cases of angina are recorded in patients where from the

evident debility & emaciation plethora could not possibly have existed but as an effect of the disease.
In this case it appears that Dr Hosack has mistaken the effect for the cause as the last cited case fully proves. —

Dr. Chapman considers Angina Pectoris of an arthritic character; in support of his opinion he cites several cases which seem obviously to warrant such a conclusion. — A Gentleman of this city was supposed by his physicians to be labouring under an attack of Angina Pectoris. Dr. Chapman being called in administered the volatile alkali internally with other diffusible stimulants, and applied sinapisms to the feet: in a short time a regular attack of Podagra was induced: as soon however as the stimulating effects subsided the disease reverted to its original seat instantaneously. —
Another case which still more strongly warrants the belief of its arthritic character is the following

A Lady who had been supposed by Drs Kuhn & Wistar to be affected with Angina drank an infusion of red pepper which drove the disease to the feet, & thus Podagra was in like manner produced. These cases are so conclusive as to preclude the necessity of making farther comment.- Much more might be said in its support; but for the sake of brevity I shall rest satisfied with what has already been adduced.-

Dissections present such a variety of phenomina as to find no clue for an investigation into this mysterious disease.- Various morbid appearances, as already observed, are sometimes revealed on dissection in this disease: such as ossifications, delatations of the vessels, and depositions of matter.- Effusions of water are sometimes discovered, & bony deposits are frequently found in the valves of the heart.-

With regard to the prognosis of this disease I will only observe that the disease is considered dan-

gerous in proportion to the violence and frequency of the attack & age of the patient. When it really depends upon an ossification of the coronary arteries or any organic lesion a cure is not to be expected: but if the patient be young & robust & the disease gradual in its approach & moderate in its violence, without any organic derangement, a cure may be reasonably expected.—

The treatment of this disease is as various as the different theories with regard to its pathology. The supporters of the spasmodic theory deducing their practice from what they consider the true nature of the disease, rely, almost entirely upon the Anti-spasmodics, such as Ether, Camphor musk & their various combinations, aided by moderate venesection. Such however is not the adopted practice of the present day.— The most approved plan of treatment in this country is that taught by the Professor of the Theory & practice in the University

of Pennsylvania. - He divides the practice into that which is proper during the paroxysm, & that which is to be pursued during the interval -

The patient as soon as attacked should be placed in a state of perfect rest. If the symptoms are then urgent accompanied by a strong & vigorous pulse venesection should be resorted to as far as circumstances will admit - The quantity of blood to be drawn may vary from fifteen to twenty ounces, unless debility should supervene: in that case a smaller quantity will suffice. As a general rule the orifice of the vein should not be closed until some decided effect is produced. If we close the orifice after extracting a few ounces of blood from an apprehension of the exhaustion that may ensue, the remedy will be totally inefficient. Such is frequently the urgency of the case that a copious detraction of blood is demanded in-stanter: in such a case the orifice

should be large enough to admit the passage of a bold stream. General depletion may be counter-indicated or rendered ineffectual. In such a case a local detraction by cups applied to the Thorax may be resorted to with advantage. As auxiliary to this last mentioned remedy the application of a blister to the breast will be found serviceable.

Our attention will be next called to the bowels, which should be freely evacuated by an active purge such as Calomel with its usual adjuncts.-

After the disease has abated its violence and arterial action reduced by previous depletion the anti-spasmodics such as laudanum, ether &c may be called into requisition with much advantage.

If called at the very commencement of an attack a large dose of laudanum or ether will frequently afford great relief, but after depletion has been pursued to some extent these remedies will be found very effectual.

The remedies that next present themselves are those proper during the interval between the paroxysms, or those which are used with a view to prevent a recurrence of the attack. - These are either topical or general. The importance of establishing a counter irritation or drain in this disease, seems to have attracted the attention of most medical practitioners. -

Dr Darwin appears among the first advocates for the practice of employing issues in the cure of this disease. - He recommends their application to the inside of the thigh; large enough to contain two peas each. These however were found objectionable on account of the difficulty in persuading the patients to adopt the remedy.

Cases are recorded where this practice has proved eminently beneficial. - The practice is now nearly obsolete and is now superceded by the use of the tartar-emetic plaster. - "The peculiar irritation" of the tartar-emetic plaster when applied to the chest appears

more suitable than the old plan of establishing a drain by the application of a perpetual blister to the same part. An irritation of a very peculiar as well as a very poisonous nature succeeds the application of the plaster. This eruption proves very difficult of cure and consequently keeps up a more permanent drain. Tartaremetic may be applied either in the form of a plaster, or of clothes rung out in a solution of ch.

Perpetual blisters applied to the rist are found beneficial, and were formally substituted for the issues on the inside of the thigh.

The general remedies are the tonics relied on for the cure of nervous & spasmodic affections. The vegetable tonics such as Bark Colombo, &c have lost much of their former reputation and are now seldom employed in the cure of this disease. The mineral tonics have supplanted the vegitable and now receive all the confidence

once bestowed on the latter - The most approved of this claſs of remedies are the Sulphates of Copper & Zinc, and Nitrate of Silver. - It appears on the authority of Dr Rush that cures have been effected by the use of the Sulphate of Zinc. Dr Chapman says nothing of these medicines. it may be fairly presumed, however, that they are entitled to some credit from their having secured the sanction of Dr Rush

To prevent a recurrence of the attack, all the exciting causes should be sedulously avoided. The diet should be light & nutritive & small in quantity, though it may be frequently taken. All fermented liquors should be avoided, as they are liable to induce gastric distention which is frequently a concomitant of the disease.

Exercise duly regulated is very beneficial. It should be taken on horse-back in preference

to any other mode - Should a tendency to plethora recur it should be obviated by an abstemious diet and evacuant remedies. —

In this brief eſsay I have adhered scrupulously to my original intention & have not advanced any thing for which I cannot cite respectable authority. - The few comments I have made are obviously deducible from the data by which I have been governed:- If not I have erred from a defect of judgment, & not with the malevolent intention of basely perverting the opinions of others -

This treatise will serve at best to shew the difficulties & embarraſsments which we encounter in deciding on subjects which are still the themes of controversy among men of eminence.

We are forced to doubt authority which our limited experience does not allow us entirely to

refute, or servilely adopt every visionary speculation that may be offered. - If we doubt we should disprove; but to arraign authority established by years of studious research and practical experience is beyond the compaſs of our limited knowledge. If we adopt without hesitation the ardour of enquiry is checked "in its mid career" and an immediate stop is put to progreſsive improvement. - In the words of an old Roman Proverb -

"Incidit in Scyllam, qui vult vitare Charybdim." —

Croup 1809

Cynanche Parotidea C Hamilton